# COLUMBIA RIVER REGIONAL FORUM

## TECHNICAL MANAGEMENT TEAM
## MEETING NOTES
## January 5, 2001
## CORPS OF ENGINEERS NORTHWESTERN DIVISION OFFICES
## CUSTOM HOUSE
## PORTLAND, OREGON

**TMT Internet Homepage:** http://www.nwd-wc.usace.army.mil/TMT/index.html

***1. Greeting and Introductions***

The January 5 Technical Management Team conference call, held at the Customs House in Portland, Oregon, was chaired by Cindy Henriksen of the Corps. The following is a distillation, not a verbatim transcript, of items discussed at the meeting and actions taken. Anyone with questions or comments about these minutes should call Henriksen at 503/808-3945.

Henriksen welcomed everyone to the meeting, then led a round of introductions and a review of the agenda.

***2. Discussion of Lower Columbia Flow Situation***.

Henriksen said this conference call had been requested by NMFS and WDFW to allow the TMT an opportunity to discuss the system operation strategy for chum and other species, in light of the newly-released January early-bird water supply forecast and revised reservoir refill probabilities. There was an FPAC call this morning, at which the current status of the Ives Island redd surveys was discussed, Henriksen said; perhaps I could ask one of the salmon managers to summarize that information.

Christine Mallette said the data discussed this morning was not new; it was the same information that was the basis for the most recent SOR, submitted Wednesday. There were a number of redds that were dewatered at that time, she said, three in all. That was at a Bonneville tailwater elevation of 11.8 feet? Scott Bettin asked. Correct, Mallette replied. What is the current viability of those redds? Henriksen asked. We don't know at this time, Jim Nielsen replied. We're waiting to hear about groundwater interactions with redds and viability in the near future, Mallette added.

Will that information be available by next Wednesday's TMT meeting? Henriksen asked. We were asked to develop information on the number of redds by next TMT meeting, but I didn't hear anything about groundwater viability, said Nielsen. Perhaps I can request that that information be made available as well, said Henriksen, adding that the most recent estimate of the total number of redds she has heard ranged between 95 and 400. That's correct, said Mallette. Nielsen said it is doubtful that the

groundwater viability information can be developed by next Wednesday. Perhaps we can at least discuss when that information might be available at Wednesday's TMT meeting, Henriksen suggested.

Pat McGrane asked whether it would be possible for the salmon managers to develop an estimate of the number of redds that would be dewatered if the tailwater elevation at Bonneville drops another foot. Michele DeHart objected to this line of conversation; we're talking about how much more damage we can do, she said, rather than how much damage has already been done. We need to keep this in the context of what has happened to date, said DeHart.

It's important for us to understand what level the fish are at, said McGrane. At your current operation of 135 Kcfs-140 Kcfs outflow from Bonneville, you're exposing some of the redds, said Nielsen – you need a tailwater elevation of 13 feet, or flows of 142 Kcfs, to keep all of the redds covered. The hydrosystem has done significant damage already, said DeHart. There is little point in arguing about history, said Henriksen – it would probably be more productive to focus our discussion today on future operations.

Henriksen added that the email she sent out earlier today will perhaps provide some insight into why McGrane is asking about tailwater elevation levels. How far forward are we looking? Nielsen asked. The model runs go from January through July, Henriksen replied; the first milepost I focused on was April 30. For the January-April period, the Corps developed two bookend scenarios, the first being to operate the system primarily to achieve April 10 flood control elevations. Under this scenario, the model shows an average flow at Bonneville during the January-March period of between 95 Kcfs and 115 Kcfs.

Under the other bookend scenario, we also operated the system to achieve the April 10 flood control elevation at all of the headwater storage projects, but allowed Grand Coulee to draft as much as necessary to achieve an average flow of 140 Kcfs at Bonneville during the January-March period, Henriksen explained. What we saw under this model run is that, given the runoff volumes shown in the early bird forecast, Grand Coulee would be empty by early February, and would miss its April 30 flood control elevation by about 15 feet.

Obviously, what this means is that, if the runoff volumes shown in the early bird forecast do in fact materialize, after early February, even with a maximum draft at Grand Coulee, we don't believe we will be able to meet a 140 Kcfs flow target at Bonneville, Henriksen said – we would probably be looking at flows in the 115 Kcfs-120 Kcfs range during February and March at Bonneville.

What runoff forecasts are these runs based on? Mallette asked. The early-bird forecast, which shows a runoff volume of 80 MAF at The Dalles during the January-July period, Henriksen replied. The Snake River is at 81% of average runoff, according to this forecast, she added, noting that the January 95% confidence interval at The Dalles is 27 MAF.

The group spent a few minutes discussing emergence timing for the chum spawners at Ives Island. McGrane then noted that, if this runoff forecast holds up, if we try to achieve 140 Kcfs outflow from Bonneville, Grand Coulee will be empty – elevation 1208 – by early February; mainstem flows will then drop to about 115 Kcfs. That's correct, said Henriksen. Robyn MacKay added that this assumes that the Canadian projects will be storing the usual 1 MAF in non-treaty storage during this period; other operations are possible there if there is a desire to keep flows up.

Nielsen observed that, if the runoff at The Dalles is indeed in the 80 MAF range this year, it will be difficult to achieve refill at Grand Coulee no matter how the system is operated. Again, said Henriksen, the operations we modeled are bookends, showing what would happen if we operate the system to keep flows as high as requested, and if it was operated to achieve refill.

So with or without any chum salmon consideration, if this early bird forecast comes true, you will not meet the spring flow or refill targets under any circumstances, DeHart observed. I think we could, actually, Henriksen replied. You could, but in real life, it's unlikely to happen, Nielsen said. Bear in mind that the early bird forecast assumes average runoff conditions for the rest of the winter, said Kyle Martin – in all likelihood, the actual water supply will be less than what's shown in the current forecast. As a result, later forecasts could go down from here.

So in other words, there is no good news, said Wagner. Correct, Henriksen replied. NMFS would like to make the point that the BiOp favors refill over flows for chum salmon, he said; now is the time for TMT to find the balance between the needs. The balancing act should begin now rather than later, and tradeoffs are needed, Wagner said. This just points out that the BiOp is inadequate to protect chum salmon, said Nielsen – it provides little or no protection for these fish. It is true that they are at the end of the line, Wagner agreed.

Martin said the tribes would prefer to see the Grand Coulee water stored for use in spring flow augmentation; he noted that CRITFC warned two months ago that Bonneville outflow should not exceed 125 Kcfs in order to avoid just this type of situation. That's a basic philosophical difference between CRITFC and other salmon managers, Nielsen replied.

In response to a question, MacKay said that, until BPA hears otherwise, they're planning to continue to release 135 Kcfs-140 Kcfs from Bonneville. The point is that flows are likely to drop some time between now and March, said McGrane; what we need to decide is whether we want to try to keep Grand Coulee fuller, or whether we want to release more water to keep flows higher in the river. Mallette noted that this discussion is based on very early forecast information; actual runoff will be different. However, based on what we know now, the likelihood is that the forecast will only worsen, said Martin. In response to another question, Henriksen said this is the third-lowest January forecast

on record; in the two worst historic years, the actual runoff was less than the forecast runoff.

NMFS would recommend operating to a tailwater elevation, rather than a specified flow, said Wagner – that could provide some opportunity to conserve water. Is that something we could adopt, from an operational perspective? Wagner asked. I think we can accommodate that, said MacKay. Did you have a specific tailwater elevation in mind? Nielsen asked. We were thinking about a 12-foot tailwater elevation, Wagner replied; while that would dewater a few redds, it would protect the majority.

Observations today showed that one of those three redds was watered at elevation 12.3 feet, said Nielsen. Basically, what NMFS is proposing is that we move toward the emphasis on refill called for in the BiOp, Wagner said. So under the NMFS proposal, 12 feet would be a minimum tailwater elevation at Bonneville? Rich Domingue asked. Correct, Wagner replied.

Mallette said the supporters of the most recent SOR continue to support their fisheries-based recommendation; in my view, she said, a minimum tailwater elevation of 12 feet at Bonneville is not adequate to protect the chum redds. However, given the concerns we have heard about the spring water supply forecast, and the BiOp's emphasis on refill, I think NMFS' feeling is that this might be an appropriate balanced approach, Henriksen said. If the water supply does recede further, as Kyle Martin has suggested is likely, we will face even tougher choices in the future, hence our informational requests, she said. DeHart said a map of the Ives Island redd sites is available via the FPC homepage.

So in essence, the federal response is that you will continue to operate the system as you have in the past two weeks? DeHart asked. Actually, at this morning's federal executive conference call, it was agreed that this would be an appropriate issue for the TMT to discuss, one participant replied. But the tailwater elevations will be approximately the same? DeHart asked. They will be slightly higher, because we're now in a higher tide situation, Wagner said.

MacKay reiterated that BPA is willing to consider a new operation at Bonneville if the TMT recommends one. The question is the impact of Ives Island protection measures on future refill and flow augmentation probabilities, Henriksen said – we would like everyone to think long-term, as well as short-term. If the objective is to maintain tailwater elevation of 12.5 feet or higher, at an average tide, that's a flow of about 145 Kcfs at Bonneville, on average. In other words, it's a higher flow than we have now. Another participant said that, based on his calculations, the Bonneville outflow needed to maintain 12.5 feet in tailwater elevation is closer to 136 Kcfs. Henriksen replied that Bonneville is currently releasing 140 Kcfs and tailwater elevation is right at 12.5 feet.

Schaller observed that the TMT will revisit this issue on a regular basis between now and April; it should be possible to modify operations from week to week, as better

forecast information comes in. Henriksen replied that the Corps would prefer to develop a longer-term strategy, rather than debating and changing operations on a weekly basis.

DeHart reiterated that, in the lowest water years, it will not be possible to meet the April 10 reservoir elevation targets anyway. This being the case, she said, it may make more sense to protect the fish that are already in the gravel. Every 5 Kcfs that goes down the river for a week is the equivalent of about one foot in Grand Coulee elevation, MacKay replied. And maintaining a tailwater elevation of 13 feet, rather than 12 feet, will cost about 1.5 feet in Grand Coulee elevation each week it is maintained, Wagner added.

Martin suggested that it might be useful to develop some estimate of the chum impacts if Bonneville is operated to 125 Kcfs discharge, 130 Kcfs discharge and 135 Kcfs discharge.

Recognizing that the TMT has another meeting scheduled for next Wednesday, perhaps I ask everyone to give some thought to the long-term impacts of the various operations that have been discussed today, Henriksen said. In the meantime, is there any sort of consensus on the 12-foot tailwater elevation proposed by NMFS. McGrane said Reclamation would have no objection to this proposed operation; Henriksen said the Corps would not object either. Schaller said USFWS recommends a tailwater elevation at Bonneville of at least 12.5 feet. So the proposed 12-foot tailwater elevation at Bonneville would not be adequate? Henriksen asked. Nielsen and Mallette said it would not be adequate, from Washington's and Oregon's perspectives.

In response to a question from Wagner, Bettin said BPA cannot guarantee that it will be possible to hold a precise 12-foot tailwater elevation 24 hours a day – actual elevations will fluctuate slightly. But if 12 feet was the minimum, what would the fluctuation be? Wagner asked. Likely 12 feet to 12.5 feet, Bettin replied.

Does that clarification change anyone's mind? Wagner asked. I think if you're waiting for consensus on the 12-foot minimum tailwater elevation at Bonneville, it will not be forthcoming, Nielsen replied. So we have NMFS' recommendation, but we have no consensus on that recommendation, Henriksen observed – from a process standpoint, where does that leave us? We could elevate it to IT, but in all likelihood, according to our IT representatives, that will be their recommendation as well, said Wagner. So in the meantime, the operation will be to release 135 Kcfs - 140 Kcfs from Bonneville? Martin asked. Yes, Wagner replied. Martin added that another cold snap is expected to hit Portland next week; the increased load that will result should be factored into whatever decision the TMT makes.

Do we want to elevate this issue to the IT? Henriksen asked. Not at this time, Nielsen replied. Mallette agreed, adding, however, that Oregon would like to be on record as disagreeing with NMFS' proposal. Typically, when we're in disagreement, don't we send it to the IT? Schaller asked. Not necessarily – it depends on how strong that disagreement is, Rudd Turner said.

In response to another question, Wagner said this operation will be discussed at next week's IT meeting, whether or not it is formally elevated to the IT. After a few minutes of additional discussion, Nielsen reiterated that WDFW does not support the NMFS recommendation, but sees little point in elevating this issue to the IT. The record needs to reflect that all data indicates that, at NMFS' recommended tailwater elevation, some redds will be dewatered, Nielsen said. Wagner agreed that this is highly likely to occur.

McGrane asked whether, given the fact that flows are likely to drop further over the next few months, it may make sense to consider more drastic actions to keep the redds watered, such as sprinklers pumping out of the river.

Steve Pettit said Idaho's position, that no actions be taken that will reduce spring refill probability and jeopardize flow augmentation, stands. With that, Henriksen summarized the outcome of today's meeting by saying that NMFS has recommended a minimum tailwater elevation at Bonneville Dam of 12 feet; we recognize that USWFS, ODFW and WDFW do not concur with this recommendation, and that they believe the minimum tailwater elevation at Bonneville should be higher. Idaho has expressed a preference to emphasize spring flow augmentation over winter flows for chum salmon. The Corps and Bonneville have no objections to maintaining the 12-foot minimum, with the understanding that we will revisit this operation at next week's TMT and IT meetings. At that time, we will have a January final forecast, and will be able to have further discussion of our long-term strategy, Henriksen said.

In response to a question from DeHart, MacKay said a Bonneville outflow of 135 Kcfs - 140 Kcfs is adequate to meet BPA load over the next week. With that, the call was adjourned. Meeting notes prepared by Jeff Kuechle, BPA contractor.

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